

## PROTOCOL

### Human Health Remedial Goal Options

#### Introduction

The following protocol has been developed in order to support the Savannah River Site environmental remediation program. This protocol provides instructions for the identification of human health remedial goal options (HH RGOs). The starting point for this protocol is with the list of preliminary human health constituents of concern (HH COCs) developed in the baseline risk assessment.

For each preliminary HH COCs, perform an uncertainty analysis in order to evaluate such factors as the CSM, probable conditions, frequency of detection, site history, and data quality. Consider whether the amount of uncertainty in the analysis is too large to warrant retention of the COC. If the COC is not to be retained, provide a detailed discussion of the basis for this decision. The uncertainty analysis will be discussed with EPA Region IV and SCDHEC in a scoping meeting.

Based on this review of uncertainty associated with the development of each COC, a final list of HH COCs will be developed. Next, remedial action objectives (RAOs) will be developed for the unit. RGOs will be determined for the final list of COCs remaining after the uncertainty analysis.

#### Details

1. Calculate RGOs for  $10^{-4}$ ,  $10^{-5}$ , and  $10^{-6}$  cancer risk levels for carcinogenic COCs and 0.1, 1, and 3 hazard quotient levels for each non-carcinogenic COCs.
2. COCs.
3. Present the information in a table such as the following.

**Table X. Remedial Goal Options-Sample Table**

		Remedial Goal Options based on Risk Levels			Remedial Goal Options based on Hazard Quotient		
Scenario	COC	$10^{-4}$	$10^{-5}$	$10^{-6}$	0.1	1	3
Hypothetical Industrial Worker	COC 1	##.#	##.#	##.#	##.#	##.#	##.#
	COC 2	##.#	##.#	##.#	##.#	##.#	##.#
	COC 3	##.#	##.#	##.#	##.#	##.#	##.#
	COC 4	##.#	##.#	##.#	##.#	##.#	##.#